CHAPTER 3

SPEED CONTROL

Speed not only makes accidents more likely, but also makes death in accidents more likely. There are several statutes in the law book dealing with speed. The most important and common sense rule is: NO PERSON SHALL DRIVE A VEHICLE ON A HIGHWAY AT A SPEED GREATER THAN IS REASONABLE AND PRUDENT UNDER THE EXISTING CONDITIONS. However, conditions are constantly changing and it may be necessary to drive slower than the posted speed limit.

Although many improvements have been made in safety equipment on vehicles, the most important safety factor in any vehicle is the control the driver has over the machine. The faster the vehicle goes and the more of that control the driver gives up, the less chance he has of avoiding an accident and the more deadly the accident will be. Accident statistics show that speed is a factor in one-fifth of all accidents and in almost half of the fatal accidents. Speed affects your ability to turn, pass, slow down, and stop. Nothing is more important to safe driving than careful control of speed.

STOPPING

The following factors affect your ability to bring your vehicle to a stop:

- Type and condition of road surface, such as concrete, asphalt, or gravel.
- Foreign material on the road, such as ice, snow, leaves, or mud.
- Road configuration, such as uphill or downhill, straight, curve, high crown, or dip.
- Tire condition, such as type and condition of tread and tire inflation.
- Brakes, such as type and state of repair and adjustment.

For any speed, the distance required to stop a vehicle in an emergency depends on three things– driver perception time, driver reaction time, and vehicle stopped time. During driver perception time and driver reaction time, the vehicle slows down very little because the brakes have not yet been applied.

Perception Distance

Perception distance is that distance traveled between the time a dangerous situation is first seen by the driver and the time he actually recognizes it as being dangerous. This time varies widely in different situations. The distance traveled will vary with the speed of the vehicle and the individual mental response of the driver.

Reaction Distance

Reaction distance is that distance traveled by a vehicle during which the driver determines the preventive action to be taken and actually sets the vehicle controls in motion. In stopping, it would include the time required to move the foot from the accelerator to the brake pedal. Some emergencies require complex reactions involving decisions to turn, increase speed, or stop and consequently require increased time for the driver to decide how to react.

Braking Distance

Ability to slow down depends on how hard and steadily the operator presses the brake, how efficient the brakes are compared to the weight of the vehicle and its load and how slippery the road surface is. Most vehicles can be stopped on a dry road surface within the distance required by state laws, but snow, ice, rain, and gravel reduce the vehicle's stopping ability and increase the distance necessary to bring the vehicle to a complete stop.

Vehicles equipped with air brakes take additional time because it takes the air time to travel through

the system to engage the brakes. This is called brake lag. The distance the vehicle travels during the brake lag is called brake lag distance.

AVOIDING COLLISIONS

Many times you can avoid a collision merely by slowing down. Even after it is too late to stop or slow down, a driver may often avoid a collision by swerving to one side. It is normally safer to swerve to the right than to the left. It is better to run off the road to the right than to collide head on. However, a speeding vehicle cannot be turned sharply without the risk of turning over. The faster a vehicle is going the more distance it takes to turn safely from a straight path.